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Dated: 8-26-05 Signature: Mary Murphy
(Mary Murphy)

Handwritten: \$ IFW

Docket No.: CWRU-P01-044
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Sanford D. Markowitz

Application No.: 10/650,112

Confirmation No.: 5888

Filed: August 26, 2003

Art Unit: 1642

For: METHODS FOR TREATING PATIENTS
AND IDENTIFYING THERAPEUTICS

Examiner: S. L. Rawlings

INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, OR more than three months after the date of entry of the national stage of a PCT application, AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)).

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

08/30/2005 CNGUYEN2 00000014 181945 10650112
01 FC:1806 180.00 DA

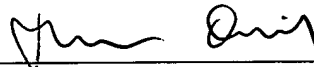
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It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

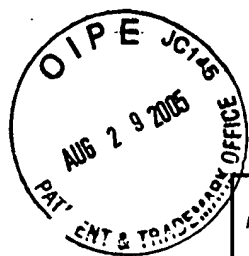
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Dated: August 26, 2005

Respectfully submitted,

By 
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PTO/SB/17 (12-04v2)
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Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).		Complete if Known	
FEE TRANSMITTAL For FY 2005		Application Number	10/650112
		Filing Date	August 26, 2003
		First Named Inventor	Sanford D. Markowitz
		Examiner Name	S. L. Rawlings
		Art Unit	1642
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Attorney Docket No.	CWRU-P01-044
TOTAL AMOUNT OF PAYMENT		(\$)	180.00

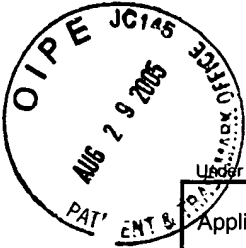
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FEE CALCULATION							
1. BASIC FILING, SEARCH, AND EXAMINATION FEES							
	FILING FEES		SEARCH FEES		EXAMINATION FEES		
		Small Entity		Small Entity		Small Entity	
Application Type	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	Fees Paid (\$)
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____
2. EXCESS CLAIM FEES							
						Fee (\$)	Small Entity Fee (\$)
Fee Description							
Each claim over 20 (including Reissues)						50	25
Each independent claim over 3 (including Reissues)						200	100
Multiple dependent claims						360	180
Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)		Multiple Dependent Claims		
_____	_____	_____	_____		Fee (\$)		Fee Paid (\$)
_____	_____	_____	_____		_____		_____
Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)				
_____	_____	_____	_____				
3. APPLICATION SIZE FEE							
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							
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4. OTHER FEE(S)							
						Fees Paid (\$)	
Non-English Specification, \$130 fee (no small entity discount)							
Other (e.g., late filing surcharge): 1806 Submission of an Information Disclosure Statement						180.00	

SUBMITTED BY			
Signature		Registration No. (Attorney/Agent)	47,874
Name (Print/Type)	John D. Quisel	Telephone	(617) 951-7685
		Date	August 26, 2005

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Application No. (if known): 10/650112

Attorney Docket No.: CWRU-P01-044

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Substitute for form 1449A/B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Application Number	10/650112
		Filing Date	August 26, 2003
		First Named Inventor	Sanford D. Markowitz
		Art Unit	1642
		Examiner Name	S. L. Rawlings
Sheet 1 of 2	Attorney Docket Number	CWRU-P01-044	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA*	US-2004/0005563-A1	01-08-2004	Mack, et al.	
	AB*	US-2003/0232350-A1	12-18-2003	Afar, et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	BA	-WO 99/38881	08-05-1999	Human Genome Sciences Inc.		
	BB	-WO 01/75067	10-11-2001	Hyseq, Inc.		
	BC	-WO 01/90357	11-29-2001	Genesis Res. Dev. Corp.		
	BD	-WO 02/21996	03-21-2002	EOS Biotechnology, Inc.		
	BE	-WO 02/30268	04-18-2002	EOS Biotechnology, Inc.		
	BF	-WO 02/50301	06-27-2002	Gene Logic, Inc. et al.		
	BG	-WO 02/068677	09-06-2002	EOS Biotechnology et al.		
	BH	-WO 04/018647	03-04-2004	Case Western Reserve Univ.		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA	Alon, U. et al. Broad patterns of gene expression revealed by clustering analysis of tumor and normal colon tissues probed by oligonucleotide arrays. PNAS 96, 745-6750 (June 1999).	
	CB	Bieller, A. et al. Isolation and Characterization of the Human Forkhead Gene FOXQ1. DNA Cell Biol. 20, 555-561 (2001).	
	CC	Deng, G. et al. Methylation of CpG in a Small Region of the hMLH1 Promoter Invariably Correlates with the Absence of Gene Expression. Cancer Res. 59, 2029-2033 (1 May 1999).	
	CD	Esteller, M. et al. Detection of Aberrant Promoter Hypermethylation of Tumor Suppressor Genes in Serum DNA from Non-Small Cell Lung Cancer Patients. Cancer Res. 59, 67-70 (1 January 1999).	
	CE	GenBank Accession No. W07459 (25 April 1996).	
	CF	GenBank Accession No. AI357412 (06 Jan. 1999).	
	CG	GenBank Accession No. AI590539 (9 April 1999).	
	CH	GenBank Accession No. AI870708 (21 July 1999).	
	CI	GenBank Accession No. BAA92054 (16 Feb. 2000).	
	CJ	GenBank Accession No. AY007815 (29 Aug. 2000).	
	CK	GenBank Accession No. AAG41062 (29 Aug. 2000).	
	CL	GenBank Accession No. XM_061091 (31 July 2002).	
	CM	Hardy, R.G. et al. Aberrant P-cadherin expression is an early event in hyperplastic and dysplastic transformation in the colon. Gut 50, 513-519 (2002).	
Examiner Signature	Date Considered		

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/650112
				Filing Date	August 26, 2003
				First Named Inventor	Sanford D. Markowitz
				Art Unit	1642
				Examiner Name	S. L. Rawlings
Sheet	2	of	2	Attorney Docket Number	CWRU-P01-044

CN	Herman, J.G. et al. Incidence and functional consequences of hMLH1 promoter hypermethylation in colorectal carcinoma. PNAS 95, 6870-6875 (June 1998).
CO	Hibi, K. et al. Molecular Detection of Genetic Alterations in the Serum of Colorectal Cancer Patients. Cancer Res. 58, 1405-1407 (1 April 1998).
CP	Kane, M.F. et al. Methylation of the hMLH1 Promoter Correlates with Lack of Expression of hMLH1 in Sporadic Colon Tumors and Mismatch Repair-defective Human Tumor Cell Lines. Cancer Res. 57, 808-811 (1 March 1997).
CQ	Kobayashi, A. et al. Molecular Cloning and Functional Characterization of a New Cap'n' Collar Family Transcription Factor Nrf3. J. Biol. Chem. 274, 6443-6452 (5 March 1999).
CR	Markowitz, S. et al. Inactivation of the Type II TGF- β Receptor in Colon Cancer Cells with Microsatellite Instability. Science 268, 1336-1338 (1995).
CS	Radice, G.L. et al. Precocious Mammary Gland Development in P-Cadherin-deficient Mice. J. Cell Biol. 139, 1025-1032 (17 Nov. 1997).
CT	Scott, D.A. et al. Refining the DFNB7-DFNB11 deafness locus using intragenic polymorphisms in a novel gene, TMEM2. Gene 246, 265-274 (2000).
CU	Shimoyama, Y. et al. Molecular Cloning of a Human Ca ²⁺ -dependent Cell-Cell Adhesion Molecule Homologous to Mouse Placental Cadherin: Its Low Expression in Human Placental Tissues. J. Cell Biol. 109, 1787-1794 (1989).
CV	Unigene Hs.157601, Homo sapiens transcribed sequences.
CW	Veigl, M.L. et al. Biallelic inactivation of hMLH1 by epigenetic gene silencing, a novel mechanism causing human MSI cancers. PNAS 95, 8698-8702 (July 1998).
CX	Weber, G.F. The metastasis gene osteopontin: a candidate target for cancer therapy. Biochim. Biophys. Acta. 1552, 61-85 (2001).
CY	Wines, M.E. et al. Identification of Mesoderm Development (mesd) Candidate Genes by Comparative Mapping and Genome Sequence Analysis. Genomics 88-98 (2001).
CZ	Wong, I.H.N. et al. Detection of Aberrant p16 Methylation in the Plasma and Serum of Liver Cancer Patients. Cancer Res. 59, 71-73 (1 Jan. 1999).
CA1	Zhang, J.-S. et al. Keratin 23 (K23), a Novel Acidic Keratin, Is Highly Induced by Histone Deacetylase Inhibitors During Differentiation of Pancreatic Cancer Cells. Genes Chromosomes Cancer 30, 123-135 (2001).
CB1	De Plaen E, et al. Immunogenetics 1994; 40: 360-9, Structure, chromosomal localization, and expression of 12 genes of the MAGE Family
CC1	Burgess WH et al. J Cell Biol 1990 Nov; 111 (5Pt 1): 2129-38, Possible Dissociation of the Heparin-binding and Mitogenic Activities of Heparin-binding (Acidic Fibroblast) Growth Factor-1 from Its Receptor-binding Activities by Site-directed Mutagenesis of a Single Lysine Residue
CD1	Bowie JU, et al. Science 1990 Mar 16; 247 (4948): 1306-10, Deciphering the Message in Protein Sequences: Tolerance to Amino Acid Substitutions
CE1	Lazar E, et al. Mol Cell Biol 1988 Mar; 8 (3): 1247-52, Transforming Growth Factor α : Mutation of Aspartic Acid 47 and Leucine 48 Results in Different Biological Activities
CF1	Skolnick J, et al. Trends Biotechnol 2000 Jan; 18 (1): 34-9, From genes to protein structure and function: novel applications of computational approaches in the genomic era
CG1	Takada I, et al. Mol. Endocrinol. 2000; 14 (5): 733-40, Alteration of a Single Amino Acid in Peroxisome Proliferator-Activated Receptor- α (PPAR α) Generates a PPAR δ Phenotype
CH1	Guo HH, et al. Proc. Natl. Acad. Sci. USA. 2004 Jun 22; 101 (25): 9205-10, Protein tolerance to random amino acid change

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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